

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)
)
Inquiry Concerning the Deployment of)
Advanced Telecommunications Capability to) GN Docket No. 04-54
All Americans in a Reasonable and Timely)
Fashion, and Possible Steps to Accelerate Such)
Deployment Pursuant to Section 706 of the)
Telecommunications Act of 1996)

**COMMENTS OF THE WIRELESS COMMUNICATIONS ASSOCIATION
INTERNATIONAL, INC.**

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EXECUTIVE SUMMARY

As the trade association of the wireless broadband industry, the Wireless Communications Association International, Inc. (“WCA”) has a direct and substantial interest in the Commission’s inquiry as to the status of broadband deployment in the United States, and the extent to which wireless providers are contributing to the Commission’s effort to ensure that broadband is made available to all Americans on a reasonable and timely basis, as required by Congress in Section 706 of the Telecommunications Act of 1996. WCA is participating in this proceeding to provide the Commission with information regarding (1) whether infrastructure capable of supporting advanced services, and particularly wireless broadband infrastructure, is being made available to all Americans; (2) recent developments in deployments of wireless broadband systems; and (3) what additional Commission actions are necessary to encourage the deployment of advanced telecommunications capability via the wireless platform.

While it is possible to deliver wireless broadband service in a variety of licensed and license-exempt frequency bands, it is well settled that licensed Multipoint Distribution Service (“MDS”) and Instructional Television Fixed Service (“ITFS”) spectrum in the 2150-2162 MHz (“2.1 GHz”) and 2500-2690 MHz (“2.5 GHz”) bands is optimally suited for delivery of ubiquitous wireless broadband service to all regions of the country. Unfortunately, as recognized by Chairman Powell, the growth of MDS/ITFS-based broadband service has been stalled in no small part by an outdated regulatory regime that “has not served the American people or the Commission’s licensees particularly well.” Yet, MDS/ITFS operators have continued to persevere and are deploying wireless broadband service in many communities throughout the United States, notwithstanding the burdens imposed by the existing MDS/ITFS rules.

It is now imperative that the Commission bring its *Notice of Proposed Rulemaking* in WT Docket No. 03-66 to conclusion and take action on the proposal submitted by WCA, the National ITFS Association and the Catholic Television Network for a substantial overhaul of the Commission’s MDS/ITFS rules (the “Coalition Proposal”). The Coalition Proposal is a testament to the Commission’s reliance on the marketplace – it paves the way for deployment of a wide range of service offerings using a myriad of disparate technologies. It allows each operator the flexibility both to select the particular set of services it believes will best meet local demand, and to choose the technology that it believes is best equipped to meet that demand. Importantly, the record in WT Docket No. 03-66 establishes that adoption of the Coalition Proposal (which enjoys near-unanimous support within the MDS/ITFS industry) will, among other things, dramatically streamline the Commission’s MDS/ITFS application and licensing process, allowing accelerated deployment of wireless broadband service in direct response to marketplace demand. The feedback WCA has received from its operator members confirms that adoption of the Coalition Proposal remains the key to robust deployment of MDS/ITFS-based broadband service.

In addressing the Coalition Proposal, the Commission should not forget the Spectrum Policy Task Force’s observation that “a level of certainty regarding one’s ability to continue to use spectrum, at least for some foreseeable period, is an essential prerequisite to investment, particularly in services requiring significant infrastructure and lead time.” This is certainly true with respect to MDS/ITFS, and the black regulatory clouds that have hung over both the 2150-2162 MHz and 2500-2690 MHz band since 2000 have had a substantial adverse impact on system deployment. As the Commission is now preparing to lift those clouds, the new rules

adopted by the Commission must give MDS/ITFS licensees sufficient time to assess marketplace demands, develop business plans, select appropriate technologies, discontinue incompatible existing services, reconfigure existing network designs to function effectively under the new MDS/ITFS bandplan, move other MDS/ITFS licensees to the new MDS/ITFS bandplan as necessary to clear markets for service, and construct and launch their facilities in orderly, cost-efficient manner. In its zeal to promote the deployment of wireless broadband, the Commission must avoid substituting its judgment for that of the licensees who are best positioned to determine the combination of services and technologies that will best meet local demands. While there are certainly large numbers of licensees that have been deploying existing technologies, many licensees have concluded that their markets will best be served by delaying deployment to await the emerging standards-based technologies, particularly those based on the upcoming 802.16 and 802.20 standards. The Commission should assure those licensees sufficient leeway to evaluate and deploy technology based on these developing standards.

Lastly, the Commission is aware that WCA, through its affiliated License-Exempt Alliance, has consistently supported the Commission's ongoing reform of Part 15 to promote license-exempt spectrum as a vehicle for delivery of wireless broadband service, especially in rural areas. WCA continues to endorse those efforts – indeed, a number of the MDS/ITFS providers discussed in these comments have used license-exempt spectrum to deliver or support the delivery of wireless broadband service in their respective markets. The experience of those providers, however, indicates that while license-exempt spectrum plainly has a vital role to play in broadband deployment, there is a substantial marketplace demand for the secure, reliable and truly ubiquitous wireless broadband infrastructure that can only be provided today over licensed spectrum. Hence, while the Commission's efforts to reform Part 15 should continue, the agency should expedite approval of the Coalition Proposal so that the licensed facilities essential to a licensed wireless broadband infrastructure can be deployed quickly in response to marketplace demand.

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**COMMENTS OF THE WIRELESS COMMUNICATIONS ASSOCIATION
INTERNATIONAL, INC.**

The Wireless Communications Association International, Inc. (“WCA”), by its attorneys, hereby submits its comments in response to the Commission’s *Notice of Inquiry* (hereinafter cited as the “*Fourth NOP*”) in the above-referenced proceeding.¹

I. INTRODUCTION.

WCA is participating in this proceeding to respond to the Commission’s request for information regarding (1) whether infrastructure capable of supporting advanced services is

¹ FCC 04-55 (rel. Mar. 17, 2004). WCA is the trade association of the wireless broadband industry. Its membership includes a wide variety of wireless broadband system operators, equipment manufacturers and vendors, and consultants interested in the deployment of licensed spectrum for wireless broadband service in, *inter alia*, the 700 MHz, 2.1 GHz, 2.3 GHz, 2.5 GHz, 18 GHz, 24 GHz, 28 GHz, 31 GHz, 38 GHz and 70/80/90 GHz bands. WCA is also the founder of the License-Exempt Alliance (“LEA”), a nationwide coalition of service providers, equipment manufacturers and vendors, and others who offer or support the provision of wireless broadband service via the 902-928 MHz, 2.4 GHz and 5 GHz bands under Part 15 of the Commission’s Rules. Whether in its own name or under the auspices of the LEA, WCA has participated in virtually every major Commission proceeding affecting the deployment of licensed and license-exempt spectrum for wireless broadband service. WCA thus has a direct and substantial interest in the Commission’s inquiry as to the status of broadband deployment in the United States and the extent to which wireless providers are contributing to the Commission’s effort to ensure that advanced telecommunications services are made available to all Americans on a reasonable and timely basis.

being made available to all Americans;² (2) recent developments in deployment of terrestrial wireless broadband systems;³ and (3) what additional Commission actions are necessary to encourage the deployment of advanced telecommunications capability, including that provided via wireless technology.⁴ As discussed below, while wireless broadband providers continue to speed the pace of broadband deployments to unserved and underserved areas, they are doing so in the face of Commission rules and policies that, however well-intentioned, have become obstacles to provision of wireless broadband service for many consumers. WCA has been at the forefront of efforts to eliminate these problems, particularly with regard to the Multipoint Distribution Service (“MDS”) and Instructional Television Fixed Service (“ITFS”) spectrum in the 2500-2690 MHz (“2.5 GHz”) band. While WCA appreciates the Commission’s efforts to date in eliminating roadblocks to the deployment of MDS/ITFS spectrum for wireless broadband, it is essential that the Commission rapidly complete those efforts and create a regulatory environment for wireless providers that promotes, rather than frustrates, introduction of new broadband service to the market.

II. DISCUSSION.

While it is possible to deliver wireless broadband service in a variety of frequency bands, it is well settled that MDS and ITFS spectrum in the 2.5 GHz band is optimally suited for delivery of a secure, reliable and ubiquitous wireless broadband service to all regions of the

² *Id.* at ¶ 1.

³ *Id.* at ¶¶ 24-25.

⁴ *Id.* at ¶ 36.

country.⁵ As recognized by Chairman Powell, however, the growth of MDS/ITFS-based broadband service has been stalled in no small part by an outdated regulatory regime that “has not served the American people or the Commission’s licensees particularly well. Our rules have, at times, been complex and stifling, and have shifted in their objectives.”⁶ Accordingly, in direct response to the October 7, 2002 “white paper” submitted by WCA, the National ITFS Association and the Catholic Television Network (the “Coalition Proposal”),⁷ the Commission issued a *Notice of Proposed Rulemaking* in WT Docket No. 03-66, proposing sweeping changes in the MDS/ITFS regulatory scheme to “facilitate the provision of high-speed data and voice services accessible to mobile as well as fixed users on channels that today are used primarily for one-way video operations to fixed locations.”⁸

The details of the Coalition Proposal and the substantial MDS/ITFS industry support for it are a matter of public record in WT Docket No. 03-66 and need not be reiterated in detail here. Suffice it to say that, if adopted, the Coalition Proposal will facilitate more rapid deployment of MDS/ITFS-based broadband services (particularly non-line of sight (“NLOS”) mobile and

⁵ See, e.g., *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1983; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Radio Services*, 15 FCC Rcd 17660, 17792 (2000) (“[MDS/ITFS] transmissions have a greater radius than upperband fixed wireless service, generally 35 miles versus three to five miles for upperband services. . . [MDS/ITFS’s] larger radius makes the service well-suited for not only residential customers, but customers in rural, underserved, and unserved areas as well.”).

⁶ *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 MHz and 2500-2690 MHz Bands*, 18 FCC Rcd 6722, 6858 (2003) (Separate Statement of Chairman Michael K. Powell) [“MDS/ITFS Rewrite NPRM”].

⁷ See “A Proposal for Revising The MDS and ITFS Regulatory Regime,” The Wireless Communications Association International, Inc. *et al.*, RM-10586, (filed Oct. 7, 2002) [“Coalition Proposal”].

⁸ *MDS/ITFS Rewrite NPRM*, 18 FCC Rcd at 6725.

portable broadband services that require a highly-cellularized network design) by rationalizing the MDS/ITFS bandplan, substituting a Part 27-like regulatory model in lieu of the current broadcast-like model, permitting the use of multiple technologies in accordance with market demand, and giving MDS/ITFS licensees maximum flexibility to transition their facilities to the new bandplan in response to marketplace needs without putting their licenses at risk.⁹

The need for expedited action on WCA's proposal (which enjoys near-unanimous support within the MDS/ITFS industry) cannot be overemphasized. As alluded to in the Chairman's remarks, the convoluted, broadcast style of interference analysis, application process and licensing in the current MDS/ITFS rules imposes excessive transaction costs (in terms of both time and money) on providers of MDS/ITFS broadband service. As burdensome as those costs are for MDS/ITFS broadband service providers in general, they are particularly onerous for those serving rural and other underserved areas where they are unable to spread those additional costs over a larger number of subscribers.¹⁰

⁹ The Coalition Proposal specifically urges the Commission to apply a "substantial service" renewal test for MDS/ITFS similar to that already applied to other wireless services (both under Part 27 and elsewhere), coupled with the well-established "safe harbors" that the Commission applies in other flexible use services and other provisions that recognize the unique circumstances surrounding the transition of MDS/ITFS licensees to the broadband model. *See, e.g.,* Comments of Wireless Communications Ass'n International, National ITFS Ass'n and Catholic Television Networks, WT Docket No. 03-66, at 86-94 (filed Sept. 8, 2003). Most importantly, the Coalition Proposal calls for the Commission to avoid relying solely on a "snapshot" taken at the time a license comes up for renewal, since a licensee that may have been providing substantial video or first generation data service during most of its license term may have diminished or discontinued that service just prior to renewal in order to facilitate the transition to newer technologies.

¹⁰ As noted by the National Telecommunications Cooperative Association ("NTCA") : "Rural carriers are especially hard hit by burdensome, unnecessary regulations. . . . However, wireless technology may provide the difficult "last mile" link to the most remote areas of rural America, areas that are very expensive, if not virtually impossible to reach via wired technology. Rural carriers should be encouraged to experiment with their wireless licenses so that they may provide service to previously unserved subscribers and bring the benefits of broadband to areas where other technologies are too costly or unavailable. [U]nder current regulation, every modification to a [MDS/ITFS] system, no matter how (continued on next page)

While WCA applauds the Chairman's recognition that a new regulatory paradigm is needed for MDS/ITFS, in this proceeding the Commission should recognize that MDS/ITFS operators have continued to persevere in spite of the existing rules and are deploying wireless broadband service in many communities throughout the United States.¹¹ Indeed, the Commission acknowledged as much when it lifted its MDS/ITFS application freeze in WT Docket No. 03-66:

The record now before us . . . indicates that notwithstanding the difficulties they face, many licensees have developed plans to deploy high-speed wireless broadband systems in the near future under our existing rules. . . It appears that several MDS/ITFS operators were well underway with serious efforts to deploy two-way, if not fully mobile, Internet access services. . . Such systems present a significant opportunity to provide alternatives for the provision of broadband services to consumers in urban, suburban and rural areas and to improve opportunities for distance learning and telemedicine services. To the extent that MDS and ITFS operators have expended time, effort and money before the *MO&O* freeze was adopted, we believe, under the circumstances presented, it would be appropriate to lift the freeze and revert to the *status quo ante*.¹²

These findings have been reaffirmed by presentations recently made by MDS/ITFS operators at agency's November 2003 Rural ISP Showcase, and by other publicly available information. Some examples:

minor, takes significant time and resources." Comments of the National Telecommunications Cooperative Association, RM-10586, at 2 (filed Nov. 14, 2002).

¹¹ As the Commission is aware, MDS/ITFS providers have also had to contend with the continuing uncertainty as to how, when and where incumbent MDS licensees will be relocated from the 2150-2162 MHz to new spectrum in order to make the 1710-1755/2110-2155 MHz band available for Advanced Wireless Services. *See, e.g.*, Petition for Reconsideration of Wireless Communications Ass'n Int'l, ET Docket No. 00-258 (Feb. 24, 2003).

¹² *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 MHz and 2500-2690 MHz Bands (Second Memorandum Opinion and Order)*, 18 FCC Rcd 16848, 16851-2 (2003).

- After nearly twelve years and well over \$20,000,000 of its own investment, W.A.T.C.H. TV (“WTC”) has successfully transformed its operations from the 11-channel analog video-only service it launched in 1992 into a state-of-the-art network that utilizes all available MDS and ITFS spectrum to provide over 200 channels of digital video and audio programming to 12,500 subscribers and broadband service to over 3,000 subscribers in Lima, Ohio and its rural outskirts.¹³ WTC utilizes first generation frequency division duplex (“FDD”) technology to provide wireless broadband services to rural subscribers with no alternative sources of service, using MDS channels 1 and 2 in the 2150-2162 MHz band for return path capacity. Recently, WTC launched second generation NLOS portable broadband service to those located in the populous portions of its service area using time division duplex (“TDD”) equipment supplied by NextNet Wireless (“NextNet”). The company is adding 140-200 broadband subscribers per month, some of whom have no choice of service providers and some of whom are selecting WTC over local cable modem and DSL providers.
- Sioux Valley Wireless (“SVW”), a wholly-owned subsidiary of Sioux Valley Energy in Colman, South Dakota, began providing MDS/ITFS-based wireless broadband service in portions of South Dakota, Minnesota and Iowa in 1998.¹⁴ The company currently serves approximately 1,700 homes and businesses with first generation equipment and intends to continue doing so in order to maintain rural service over longer distances. Upon adoption of the Coalition Proposal, SVW intends to use second generation equipment to deliver NLOS broadband service in the city of Sioux Falls and the surrounding area.
- CommSpeed began providing MDS/ITFS-based broadband service in northern Arizona in January, 2000. Since that time CommSpeed has become the largest ISP in the area, serving 5,200 subscribers from eight transmission locations.¹⁵ The company is adding approximately 200-250 subscribers per month, and competes with cable modem service in approximately 90% of its service area and DSL in approximately 50% of its service area. CommSpeed’s customer base includes residents, businesses, Indian reservations and educational and municipal facilities, some of which have no cable modem or DSL service or even any landline telephone service. CommSpeed is preparing to launch second-generation, NLOS service in additional rural markets upon adoption of the Coalition Proposal. The company anticipates that the reduced licensing burdens

¹³ See, e.g., Barthold, “W.A.T.C.H. Out!” *Telephony* (Aug. 27, 2001); Comments of W.A.T.C.H. TV Company, WT Docket No. 03-66, at 1-2 (filed Sept. 8, 2003).

¹⁴ See “Company and Organization Descriptions at Rural Wireless ISP Showcase and Workshop,” available at <http://www.fcc.gov/osp/rural-wisp/rural-wisporgs.html>; Reply Comments of Sioux Valley Wireless, WT Docket No. 03-66 (filed Oct. 23, 2003).

¹⁵ See Comments of Virginia Communications, Inc., WT Docket No. 03-66 (filed Apr. 8, 2003).

under the Coalition Proposal will significantly increase its ability to deploy service quickly, and will substantially reduce costs related to licensing procedures.

- WinBeam, Incorporated, based in Greensburg, PA, was formed in 2000 to provide wireless broadband service to smaller cities, towns and rural areas in Pennsylvania. Its MDS/ITFS footprint encompasses 2.2 million households outside of Pennsylvania's metropolitan areas. The company initially deployed a first generation system in Altoona during October, 2001, focusing on commercial customers; it began providing services to residential areas in Altoona during January, 2003. Presently, the company has over 300 customers in the city, split evenly between commercial and residential customers, and competes directly with cable modem and DSL service. WinBeam also plans to provide service to the adjoining counties of Huntingdon and Bedford, both of which have little or no affordable wired broadband service. Ultimately, WinBeam desires to build out its wireless broadband service to cover the entire I-99 corridor from Bedford to State College and east to Lewiston, Chambersburg and Harrisburg which, again, generally have very poor service from cable modem and DSL providers. However, the application processing delays created by the current MDS/ITFS rules are stalling WinBeam's deployments; the company believes that adoption of the Coalition Proposal would eliminate that problem.
- NTELOS, a provider of DSL and PCS service in smaller and rural markets in southwestern Virginia, is operating an MDS/ITFS-based broadband system in Charlottesville and Harrisonburg, providing NLOS service using TDD technology supplied by Navini Networks, Inc. ("Navini"). Although NTELOS already was providing DSL service within its wireless footprint, the Commission's recently-adopted rules on line-sharing have forced it to migrate to the wireless broadband model. The company expects to obtain authorization to expand its MDS/ITFS broadband service into Lynchburg later this year, and will be in a position to accelerate deployments upon adoption of the Coalition Proposal.
- Plateau Telecommunications ("Plateau") has committed to delivering wireless broadband services over MDS/ITFS spectrum to underserved business and residential subscribers across a 28,000 square mile footprint in New Mexico.¹⁶ Plateau began offering its MDS/ITFS-based wireless broadband service in January 2004, and signed up over 1,100 customers during its first month of service alone. It currently serves 2,000 customers in five cities with a population base of over 130,000. Although Plateau competes with cable modem service in two cities and DSL in all five cities, cable modem and DSL providers have not made the investments necessary for aggressive deployments in much of Plateau's

¹⁶ See "NextNet and Plateau Telecommunications Ink Deal for America's Largest NLOS Plug-and-Play Broadband Wireless Deployment," *Business Wire* (Nov. 13, 2003).

service area. Plateau is presently completing market analysis in five other markets to determine the feasibility of wireless broadband deployment in those areas.

- On January 8, 2003, Rioplex Wireless, Ltd. (“Rioplex”) announced plans to deploy a second generation MDS/ITFS-based wireless broadband network to serve customers in the lower Rio Grande Valley, an area covering much of South Texas, using Navini TDD equipment. The deployment will be the first full coverage broadband service in the area (encompassing 5,000 square miles), and will provide service to every county in the Rio Grande Valley from Western Rio Grande City to South Padre Island.¹⁷ Rioplex already provides service to 19 communities and surrounding areas in the Rio Grande Valley, with expansion into Harlingen and Brownsville anticipated in the near term.¹⁸
- Evertex, using NextNet TDD equipment, has expanded its wireless broadband system across five new Iowa markets, having already launched the service in Pocahontas, Iowa in December 2001. The expansion covers over 19,000 subscribers in Sheldon, LeMars, Kingsley, Holstein, and Ida Grove, IA.¹⁹ In addition, NextNet and Grand Forks Wireless are delivering MDS/ITFS-based broadband service to residential and business subscribers in Yuma, Arizona.²⁰
- Gryphon Wireless provides broadband service via leased ITFS channels in Kearney, NE. Its system also utilizes NLOS TDD technology, and is designed to provide service to residential and small businesses in Kearney and the surrounding rural areas. Gryphon has already completed successful market trials

¹⁷ See “Rioplex Wireless Deploying World’s Largest Next-Generation Wireless Broadband Network,” *PR Newswire* (Jan. 8, 2003).

¹⁸ See <http://www.rioplexwireless.com/coverage.html>. The communities served are Alamo, Alton, Donna, Edinburg, Hidalgo, La Feria, La Joya, La Villa, Laguna Vista, McAllen, Mercedes, Mission, Palmview, Pharr, Port Isabel, San Juan, Sharyland, South Padre Island, and Weslaco.

¹⁹ See “NextNet and Evertex Expand Plug-and-Play Broadband Wireless System to Five New Markets, Covering Over 19,000 Subscribers,” *Business Wire* (Nov. 11, 2002).

²⁰ See “NextNet and Grand Forks Wireless Deliver Broadband Wireless Access to Yuma, Arizona,” *Business Wire* (June 25, 2002). In addition, Teewinot Wireless Data has launched MDS/ITFS-based 3G wireless broadband service in Missoula, Montana. As observed by Senator Conrad Burns (R-Montana) at the launch of the service, “[p]eople in rural states like Montana need to have access like this to ensure their inclusion in the rapidly expanding information age. . . A solid technological infrastructure such as this is part of the foundation needed to encourage small business growth in our communities.” See generally Mansell, “IPWireless Gaining Customers,” *Kagan Broadband Fixed Wireless*, at 6 (May 6, 2002); Rush, “3G Arrives in Montana,” *CED Broadband Direct* (June 3, 2002); “3G Broadband Wireless Comes to Montana; U.S. Senator Conrad Burns Hails the Nation’s First Mobile Broadband Deployment,” <http://www.teewinot.tv/PR060302.htm> (June 3, 2002).

of its system and has begun signing up customers.²¹ Further expansion of the system's coverage and capacity is tied to issuance of the new MDS/ITFS rules.

- PinPoint, a Nebraska-based provider of landline telephone, cable television/cable modem, PCS, paging, DSL and wireless broadband services, holds rights to MDS spectrum in Nebraska and Colorado through which it intends to provide broadband to customers beyond the reach of its cable modem and DSL services. PinPoint is awaiting adoption of the Coalition Proposal so that it may begin deployment under the more favorable regulatory paradigm proposed thereunder.

In addressing the Coalition Proposal, the Commission should not forget the Spectrum Policy Task Force's finding that "a level of certainty regarding one's ability to continue to use spectrum, at least for some foreseeable period, is an essential prerequisite to investment, particularly in services requiring significant infrastructure and lead time."²² This is certainly true with respect to MDS/ITFS, and the black regulatory clouds that have hung over both the 2150-2162 MHz band and 2500-2690 MHz band since 2000 have had a substantial adverse impact on system deployment.²³ While the MDS/ITFS service providers discussed above and many others

²¹ See Gottula, "Wireless Firm Beats Goliath," *Kearney Hub* (May 6, 2004) available at http://www.kearneyhub.com/archive/05_06/archive.htm ("Gryphon is not the first company to offer wireless service in Kearney or Nebraska, but it is one of the first with an FCC license that offers mobile service that doesn't require a direct line of sight to the customer. 'People want to be mobile, but the options haven't been there,' Leigh Ann Spellman said. 'Until now, the technology has been limited.'").

²² Report of the Spectrum Policy Task Force, Federal Communications Commission, ET Docket No. 02-135, at 23 (Nov. 2002).

²³ In its *Notice of Proposed Rulemaking* in ET Docket No. 00-258 released in January, 2001, the Commission threw the MDS/ITFS industry into flux by requesting comment on whether it should reallocate the MDS/ITFS spectrum in the 2.5 GHz band or any portion for Advanced Wireless Services ("AWS"). See *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems*, 16 FCC Rcd 596, 621 (2001) ["NPRM"]. In that same document, the Commission asked for comment on "what effect reallocation or relocation of the 2150-2162 MHz band [for AWS] would have on [the MDS/ITFS industry's] current and planned use of the spectrum." *Id.* at 619. In a decision released on September 24, 2001, the Commission found that "the 2500-2690 MHz band is extensively used by incumbent ITFS and MMDS licensees," and that "the services currently being provided and planned in the 2500-2690 MHz band . . . have significant value," and thus Commission decided not to reallocate any of the 2500-2690 MHz band for AWS, instead adding a mobile allocation for the 2500-2690 MHz band to give MDS/ITFS the same sort of flexibility that is driving efficient utilization of other wireless spectrum. *Amendment of Part 2 of the Commission's Rules to Allocate* (continued on next page)

have managed to commence limited delivery of broadband service under the existing regulatory paradigm, action on the Coalition Proposal (as well as the relocation of MDS channels 1 and 2/2A) is necessary to unleash MDS/ITFS spectrum's full potential as a viable broadband alternative.

The Coalition Proposal is a testament to the Commission's reliance on the marketplace – it paves the way for deployment of a wide range of service offerings using a myriad of disparate technologies. It allows each operator the flexibility both to select the particular set of services it believes will best meet local demand, and to choose the technology that it believes is best equipped to meet that demand. The Coalition Proposal is premised on the notion that it is the local licensee, not regulators in Washington, who are best able to identify both the nature of the offering that will best serve the public within its service area and when there is sufficient public demand to justify the expense of deployment.²⁴

Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, 16 FCC Rcd 17222, 17223, 17236-8 (2001) (emphasis added). However, as noted above, the rule proposals in WT Docket No. 03-66 that would permit MDS/ITFS operators to take advantage of this ruling remain pending. Moreover, nearly three and a half years after the Commission first raised the issue in ET Docket No. 00-258, MDS licensees in the 2150-2162 MHz band still do not know how, when or to what spectrum they will be relocated.

²⁴ Indeed, one important component of the Coalition Proposal is that it allows transitions to the new bandplan to occur on a market-by-market basis. This approach was adopted to assure that transitions occur when the local marketplace demands they occur rather than in response to an arbitrary deadline. It allows existing services to continue without transitioning to the new bandplan until one licensee either in the market or in a nearby market that would suffer interference demands transition. The net result is that licensees can focus their efforts and capital on deploying service where demand is greatest, and not be forced to invest prematurely in other markets. Indeed, under the Coalition Proposal a system operator that is providing an analog video service in a remote region of the country never has to transition unless or until either a licensee in its market determines that the new bandplan will better serve the local population, or a licensee in an adjacent market requires the transition to avoid interference it would otherwise suffer as a result of continued operation of the analog video system. Of course, some vendors may not agree with the Coalition Proposal, as it does not mandate that licensees purchase new technology immediately. However, consistent with the Commission's belief in the marketplace, the better approach (continued on next page)

As the Commission is now preparing to lift the regulatory clouds that have hovered over MDS/ITFS, the new rules to be adopted by the Commission must give MDS/ITFS licensees sufficient time to assess marketplace demands, develop business plans, select appropriate technologies, discontinue existing service offerings to the extent they are incompatible with their new offerings, reconfigure existing network designs to function effectively under the new MDS/ITFS bandplan, move other MDS/ITFS licensees to the new MDS/ITFS bandplan as necessary to clear markets for service, and construct and launch their facilities in orderly, cost-efficient manner.²⁵ In its zeal to promote the deployment of wireless broadband, the Commission must avoid substituting its judgment for that of the local licensees who are best positioned to determine the combination of services and technologies that will best meet local demands. While there are certainly large numbers of licensees that have been deploying existing technologies, many licensees have concluded that their markets will best be served by delaying deployment to await the emerging standards-based technologies, particularly those based on the upcoming 802.16 and 802.20 standards.²⁶

is to trust licensees to make the correct deployment decision at such time as vendors can produce technology that truly advances the needs of the local population.

²⁵ Therefore, as noted above, a critical component of the Coalition Proposal is that, at least for the next MDS/ITFS renewal cycle, the Commission not merely examine the service that is being provided at the time of renewal, but also consider whether substantial service was provided at any time during the license term. *See* Coalition Proposal at 46 n.122. To do otherwise would plainly compromise the Commission's policy of flexible use – licensees will be reluctant to migrate from one service to another when approaching renewal, regardless of marketplace demand, for fear that they will not be providing substantial service at renewal time.

²⁶ *See* SPTF Report at 17 (stating that (1) spectrum users should have the maximum possible flexibility to decide how spectrum will be used, so long as they comply with the technical rules applicable to their spectrum, and (2) spectrum users should be allowed to choose the technology that is best-suited to their proposed use or service, and should also be given the freedom to adapt their technology to their particular spectrum environment.).

For example, the *Fourth NOI* asks whether there are “new technologies that are now being used to provide high-speed advanced services, or likely to be used in the near future, such as Wi-Fi or Wi-Max.”²⁷ As to WiMAX, the answer appears to be yes – recent trade press reports confirm that the wireless industry is becoming increasingly enthusiastic about WiMAX’s potential to facilitate standards-based, interoperable wireless broadband products that yield economies of scale, pricing and performance levels “unachievable by proprietary approaches.”²⁸ Certification and interoperability testing of the technology is scheduled to begin later this year, and it is anticipated that the first WiMAX-certified products will be introduced commercially in 2005, with mobility to be added thereafter.²⁹ The 802.20 effort is not quite as far along, but is proceeding apace. While WCA appreciates the Commission’s desire to expedite broadband deployment, MDS/ITFS licensees (who perhaps stand to benefit most from the unique benefits of standards-based wireless broadband technology) should be provided a full and fair opportunity to evaluate the new standards and determine whether standards-based equipment is best suited for the particular circumstances of the marketplaces they serve.

Finally, by now the Commission is aware that WCA, through its affiliated License-Exempt Alliance, has consistently supported the Commission’s ongoing reform of Part 15 to promote license-exempt spectrum as a vehicle for delivery of wireless broadband service, especially in rural areas.³⁰ WCA continues to endorse those efforts – indeed, a number of the

²⁷ *Fourth NOI* at ¶ 25.

²⁸ “Major Service Providers Join WiMAX Forum, Broaden Support for Global Broadband Wireless Access Standard,” WiMAX Forum Press Release (Apr. 26, 2004).

²⁹ *Id.*

³⁰ See, e.g., Comments of License-Exempt Alliance, ET Docket No. 03-201 (filed Jan. 23, 2004); Reply Comments of the License-Exempt Alliance, ET Docket No. 03-122 (filed Sept. 23, 2003); Comments of (continued on next page)

MDS/ITFS providers discussed above have used license-exempt spectrum to deliver or support the delivery of wireless broadband service in their respective markets. The experience of those providers, however, confirms that while license-exempt spectrum plainly has a vital role to play in broadband deployment, there is a substantial marketplace demand for the secure, reliable and truly ubiquitous wireless broadband infrastructure that can only be provided today over licensed spectrum below 3 GHz.³¹ Hence, while the Commission should continue its ongoing effort to reform Part 15, there is little dispute that licensed MDS/ITFS spectrum will play a critical role in providing service to small, customer-friendly portable and mobile devices over distances of many miles. This is precisely the sort of capability that the Commission's broadband agenda requires – the Commission should therefore do whatever is necessary in WT Docket No. 03-66 to expedite approval of the Coalition Proposal and thereby pave the way for deployment of the

the License-Exempt Alliance, ET Docket No. 03-122 (filed Sept. 3, 2003); Reply Comments of the License-Exempt Alliance, ET Docket No. 02-380 (filed May 16, 2003); Comments of the License-Exempt Alliance, WT Docket No. 02-381 (filed Feb. 3, 2003); Comments of the License-Exempt Alliance, ET Docket No. 02-135 (filed Jan. 27, 2003).

³¹ For example, in March 2004 WinBeam expanded its network to the north of Altoona by utilizing license-exempt spectrum – it did so because the communities involved were small, and thus it was not practical or cost-effective to apply for Commission authorization and wait 6-12 months for the agency to issue the appropriate MDS/ITFS authorization for service. Having now had some experience with license-exempt deployments, WinBeam has concluded that the higher power limits applicable to licensed MDS/ITFS spectrum are more suitable for wide-area, cost-efficient broadband service; that, conversely, coverage of a large geographic area with license-exempt equipment requires many more base stations, thus making backhaul and system maintenance more complex and expensive; that, since license-exempt spectrum enjoys no interference protection, it is more vulnerable to outages caused by other spectrum users; and that investors are reluctant to put capital into license-exempt deployments for all of these reasons. Similarly, SVW uses license-exempt spectrum as “boosters” for its MDS/ITFS network. Although SVW has enjoyed good success with this approach, its recent experience with a license-exempt market trial in Sioux Falls established that interference problems (particularly those caused by other license-exempt providers) render the license-exempt solution problematic over the longer term. SVW continues to believe that license-exempt spectrum is an excellent vehicle for point-to-point backhaul, where performance is more predictable due to point-to-point propagation. For point-to-multipoint deployments, however, SVW has concluded that reliance on license-exempt spectrum is not a viable option.

licensed MDS/ITFS services that are necessary for the development of a robust wireless broadband infrastructure throughout the country.

WHEREFORE, for the reasons set forth above, WCA reiterates its support for the public interest objectives of the *Fourth NOI* and urges the Commission to adopt the Coalition Proposal in WT Docket No. 03-66.

Respectfully submitted,

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